

U.S. ARMY CHIEF OF ENGINEERS

1969

Distinguished Design Awards

For

- ARCHITECTURE,
- ENGINEERING And
- LANDSCAPE ARCHITECTURE

FOREWORD

The Chief of Engineers Design Awards Program for 1969 surpasses efforts of past years to recognize excellence in the design of diversified facilities throughout the world. In addition to the continuing search for economy and functionality of structures, increased emphasis has been placed on the esthetic blending of facilities with their environs.

The entries considered in the competition this year include both military and civil works projects. The entries in architectural, engineering, and landscape architectural categories reflect the increasing accent on ecological consideration and designing structures for people. Conservation of natural beauty and improvement of environmental quality through careful planning and design must be considered as two of our continuing major objectives.

The Corps is especially indebted to the Presidents of the American Institute of Architects, the American Society of Civil Engineers, and the American Society of Landscape Architects, who served this year as chairmen of the three juries. The members of these juries who are prominent leaders in their respective professions have made significant contributions to the success of the program. Their observations and critiques on all entries furnish valuable guidance for future work. I am confident that continued collaboration with these national societies will provide the stimulus that will assure continued progress and success in this program.

Lieutenant General, USA Chief of Engineers

F. J. CLARK

1969 ARCHITECTURAL DESIGN AWARDS

FIRST PLACE

ANDREW RADER ARMY CLINIC Fort Myer, Virginia

HONORABLE MENTION ARMY WAR COLLEGE AUDITORIUM Carlisle Barracks, Pennsylvania

COMPOSITE MEDICAL FACILITY Shaw Air Force Base, South Carolina

BASE CHAPEL AND ANNEX Wheeler AFB, Hawaii



Architectural Award Judges: Nes; Murphy; and Kassabaum, Panel Chairman.

JUDGES

George E. Kassabaum, FAIA Hellmuth, Obata & Kassabaum, St. Louis, Missouri

Charles M. Nes, Jr., FAIA Fisher, Nes, Campbell & Partners, Baltimore, Maryland

Joseph D. Murphy, FAIA Murphy and Mackey, Architects, Inc., St. Louis, Missouri Mr. Kassabaum was elected president of the American Institute of Architects in 1968 after serving terms as vice president and first vice president. In 1967 he served as chairman of the AIA Council of Commissioners, and was responsible for AIA liaison with various construction industry groups. Following his graduation from Washington University in 1947, Mr. Kassabaum taught architectural design for three years before joining his present firm, which was then Hellmuth, Yamasaki & Leinweber.

Mr. Nes is a partner in the firm of Fisher, Nes, Campbell & Partners, Baltimore, Maryland. Graduated from Princeton University in 1928 and attended Princeton Graduate School of Architecture 1928-30. Winner of Butler Prize in architecture. Mr. Nes was president of AIA in 1966-67.

Mr. Murphy attended Rockhurst College (Kansas City, Mo.) Massachusetts Institute of Technology, and Ecole des Beaux Arts, Paris, France. He was Professor of Architecture from 1948-52, former president of the St. Louis Chapter, American Institute of Architects, and a Fellow of the American Institute of Architects. He is chairman of the University City Planning Commission and the St. Louis Planning Commission. Mr. Murphy is a member of the Army Chief of Engineers Architectural Advisory Panel.

FIRST PLACE AWARD

ANDREW RADER ARMY CLINIC Fort Myer, Virginia

Design: McGaughan & Johnson, Washington, D. C.

Supervision: Norfolk District

Contractor:
Tuckman-Barbee Construction Corporation, Inc.

ARCHITECTURAL DESIGN

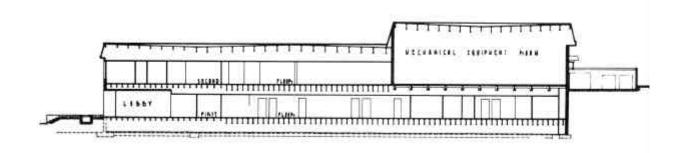
Project Description:

This dispensary and dental clinic has most of the medical facilities of a hospital except the nursing units. The dental clinic includes surgical, prosthetic and laboratory facilities. Each clinic is complete in itself and has its own waiting room. All medical clinics are served by a central appointments office and patient control center with a central records file. Fifteen waiting rooms are provided for clinics and laboratories.



Judges' Comments:

The majority of the Jury selected the Andrew Rader Army Clinic at Fort Myer, Virginia, as being the best total submission in this year's competition. It presents a strong, powerful and yet calm exterior treatment to a building housing complex functions. The restraint in the use of color and material results in a dignified and most pleasing simple statement, with the main entrance facade having good scale, and the other elevations equally well handled. The arrangement of main corridors permits convenient access to the nineteen units housed in the building. Also, the architect was commended for his recognition and expression in the design of the mechanical systems.



ARMY WAR COLLEGE AUDITORIUM Carlisle Barracks, Pennsylvania

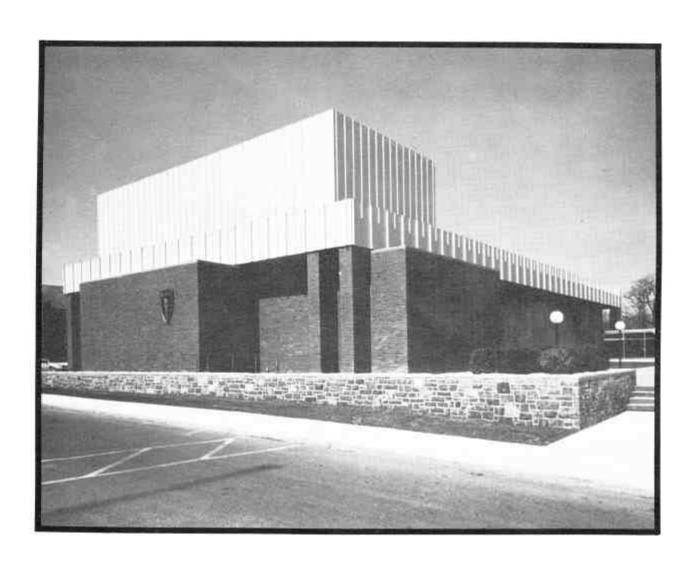
Design: Haines, Lundburg & Waehler New York, New York

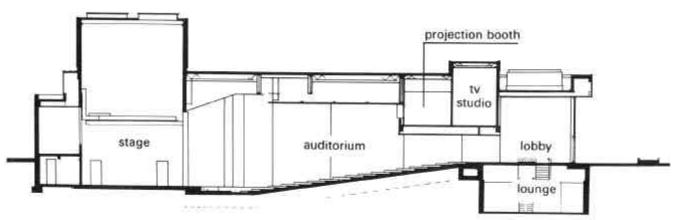
Supervision:
Baltimore District

ARCHITECTURAL DESIGN

Judges' Comments:

This project is successful in harmonizing well with surrounding older buildings. The auditorium is serene, restful and clearly expresses its functions. The care taken in the site development with respect to adjacent buildings creates pleasant courts that do much to enhance the total composition.





COMPOSITE MEDICAL FACILITY Shaw Air Force Base, South Carolina

Design: Lyles, Bissett, Carlisle and Wolff Columbia, South Carolina

Supervision: Savannah District

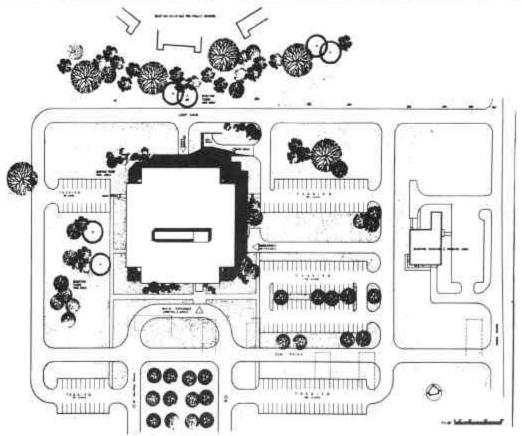
ARCHITECTURAL DESIGN

Judges' Comments:

An orderly plan serves a complex variety of functions. The first floor plan expresses the closed out-patient clinical needs and the second floor plan provides natural light and vision and meets the needs for the patients in a pleasant way. Direct and well-proportioned circulation, flexibility of clinical spaces and in addition to these qualities the internal treatment of the corners is an attractive contribution to the living qualities of the second floor.

Simple, dignified well-proportioned form expresses the enclosed clinical spaces on the first floor and the open bedroom spaces on the second floor.





BASE CHAPEL AND ANNEX Wheeler Air Force Base, Honolulu, Hawaii

Design:
Hogan and Chapman
Honolulu, Hawaii

Supervision: Honolulu District

ARCHITECTURAL DESIGN

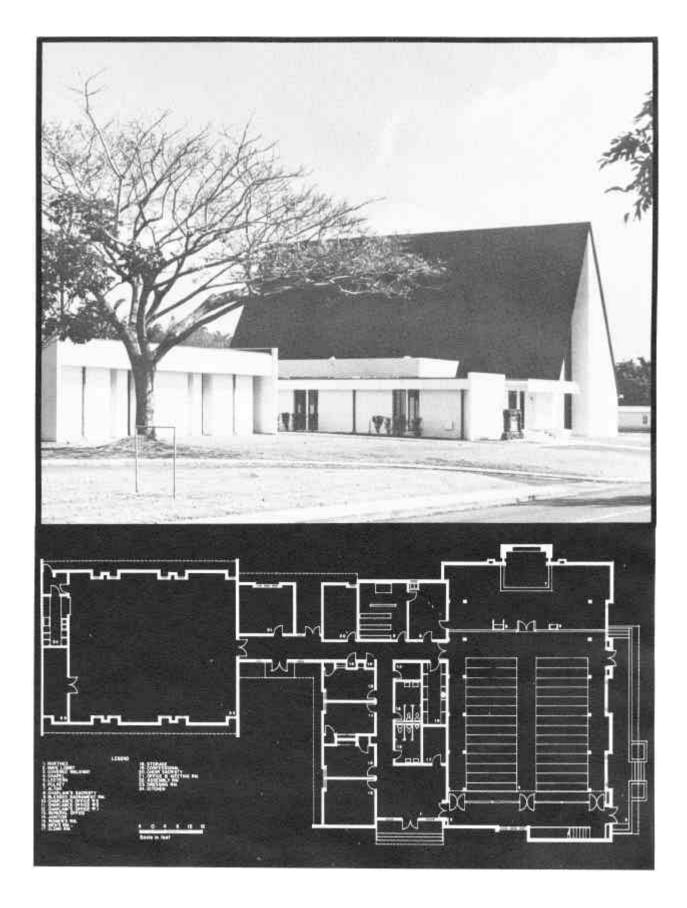
Judges' Comments:

The Architect is to be commended for designing this project so that the Chapel dominates the composition through its form and roof color. There is nice harmony in the total composition in the use of materials, form and scale, reflecting careful attention to details. The interiors are as carefully handled as the exterior resulting in a pleasant environment through the sensitive use of stained glass, natural light and wood.

The Jury commends the designers of the following entries:

Theater, Kadena Air Base, Okinawa — for good use of local materials.

Library, Ft. Lewis, Washington — pleasant interior, simple form showing that a small building can benefit from careful design.



1969 ENGINEERING DESIGN AWARDS

FIRST PLACE

JOHN DAY LOCK AND DAM, Columbia River Washington and Oregon

HONORABLE MENTION NEW POE LOCK, ST. MARYS RIVER, Sault Ste. Marie, Michigan

MANNED SPACECRAFT CENTER Houston, Texas

FINDLAY HIGHWAY BRIDGE Shelbyville Reservoir, Shelbyville, Illinois



Engineering Award Judges: Fox; Newnam; Panel Chairman, and Miller

JUDGES

Frank H. Newnam, Jr.

Arthur J. Fox, Jr.

Joseph Miller

Mr. Newnam is president and co-owner of the Houston, Texas consulting engineering firm of Lockwood, Andrews & Newnam. He was president of the American Society of Civil Engineers in 1968-69. Among his other affiliations with professional and community organizations he has served as president of the Texas Society of Professional Engineers and is currently a member of the Board of Trustees of Baylor University. Mr. Newnam received a Bachelor of Science degree in civil engineering from Texas A & M University and did graduate work in soil mechanics and foundations at the University of Texas.

Editor of ENGINEERING NEWS-RECORD, Mr. Fox graduated from Manhattan College in 1947 with a degree in civil engineering. He joined EN-R's staff in July 1948, as an assistant editor and worked his first year on the magazine's news desk. His news articles and editorials for EN-R in the early 1950's helped shape Public Law 660, the Federal Water Pollution Control Act of 1956. He is a director of ASCE.

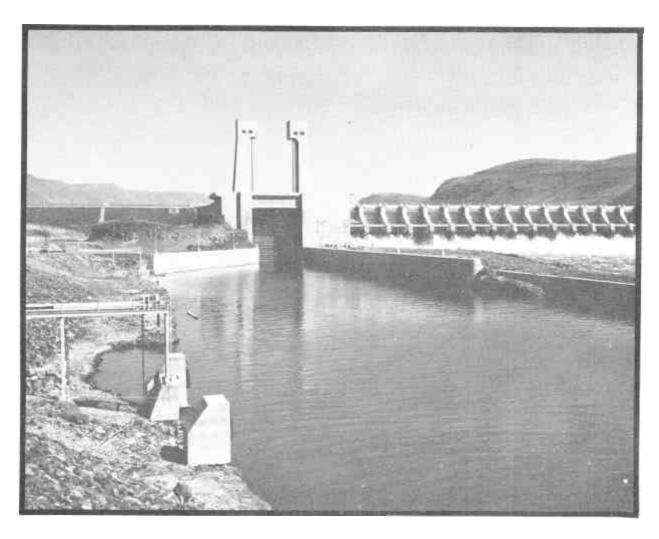
Partner of the architectural firm of Chapman and Miller, Washington, D. C., Mr. Miller was graduated from Catholic University of America in 1938 with a Bachelor of Architecture Degree Summa Cum Laude and was awarded the AIA Scholarship Medal. He is nationally prominent for his design of educational facilities and has received awards of architectural merit for residential and religious buildings. Mr. Miller is currently a member of the Architectural Review Panel of the District of Columbia Redevelopment Land Agency and coordinator of the Urban Graduate Program at Catholic University.

FIRST PLACE AWARD JOHN DAY LOCK AND DAM, Columbia River, Washington and Oregon

Design: Walla Walla District

ENGINEERING DESIGN Project Description:

John Day Lock and Dam is a multipurpose project on the Columbia River in Oregon and Washington. Included among its principal features are a navigation lock with a single lift of 113 feet, a power plant with an initial IO-unit capacity of 1,350,000 KW and an ultimate 20-unit capacity of 2,700,000 KW, currently the largest in the U. S.; the 1,252 foot long spillway controlled by 20-50' x 58.5' crest gates; and fish passing facilities on both ends of the dam.



Judges' Comments:

John Day Lock and Dam, Columbia River was selected for the First Place Award because of its comprehensive design achievement, considering the magnitude of the project, its multi-disciplinary requirements, and the complexity of engineering and construction problems involved. As the most recent main stream dam the Corps has built on the Columbia River, this structure embodies a culmination of many years of design experience. This tremendous river required continuous and careful control over several years of construction. Raising the water level required the relocation of major railroads, highways, and at least one town. The designers were further challenged by the need to provide an extremely high lift lock.

The jury took into consideration the unusual programmatic conditions which complicated the design problem, including large scale planning and construction aspects, and noted that efficient and skillful solutions were produced for this many faceted project. In terms of architectural appearance, the decision is unified, well-articulated and restrained. Major design features are interesting in form and detail. Smaller elements, such as the fish ladder, are neatly designed and expertly related to the entire composition, while still maintaining maximum functional efficiency. Materials throughout have been logically selected and expressed. In addition to the engineering functions the complex has significant recreational value, not only to this area but to the entire country.

NEW POE LOCK, ST. MARYS RIVER, Sault Ste. Marie, Michigan

Design:
Detroit and Buffalo Districts

Construction Supervision: Detroit District

ENGINEERING DESIGN Judges' Comments:

In awarding Honorable Mention to this project, it was noted that its outstanding feature was the ingenious approach that was used to overcome very difficult engineering problems. These problems included the construction of a large lock between existing locks and control buildings without interruption to the use of the existing locks. This work had to be accomplished economically, and also with great care, to avoid endangering the existing structures. The successful preservation of the structures is testimony to the engineering ability of the designers. It is also noted that the finished project is in harmony with the existing environment of the area.

Engineering does not stop with design. In this connection, the jury members were aware of the resourceful methods of construction that made this project feasible despite great restrictions of space. Keeping the existing locks operable during the new construction was an outstanding accomplishment, particularly with reference to the difficulties of transporting and handling construction equipment and extensive quantities of materials.



ENGINEERING DESIGN

MANNED SPACECRAFT CENTER, Houston, Texas

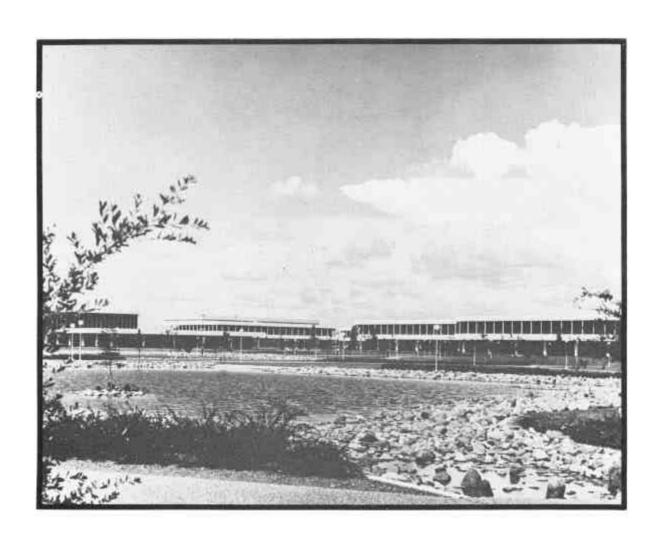
Design and Construction Supervision: Fort Worth District

Judges' Comments:

The project is selected for Honorable Mention as an outstanding inter-disciplinary team effort by the Corps of Engineers working in conjunction with Architect-Engineers to solve an extremely complex set of engineering problems to develop facilities that simulate every condition that may be met in outer space and on the moon. In fact, it could be said that man could not have reached the moon in 1969 without the concepts developed and tried here. While the installations in the buildings themselves are difficult to portray, the well publicized output has been spectacular.

This unique project for the enlargement of scientific technology has no precedent. It really is a venture into new fields to provide sophisticated control facilities and specialized environments for training and physical conditioning of manpower. The results are the product of major engineering achievements that involve all branches of engineering.

Architecturally, the center, although functional and administrative in use, has been beautified by the pleasant garden which has been placed in the center of the complex to create attractive open space for personnel who use the area. This campus-type environment is particularly appropriate for the scholarly and professional personnel employed at the center and for the unusually large number of notable visitors.



FINDLAY HIGHWAY BRIDGE Shelbyville Reservoir, Shelbyville, Illinois

Design: Clarke, Dietz and Associates Urbana, Illinois

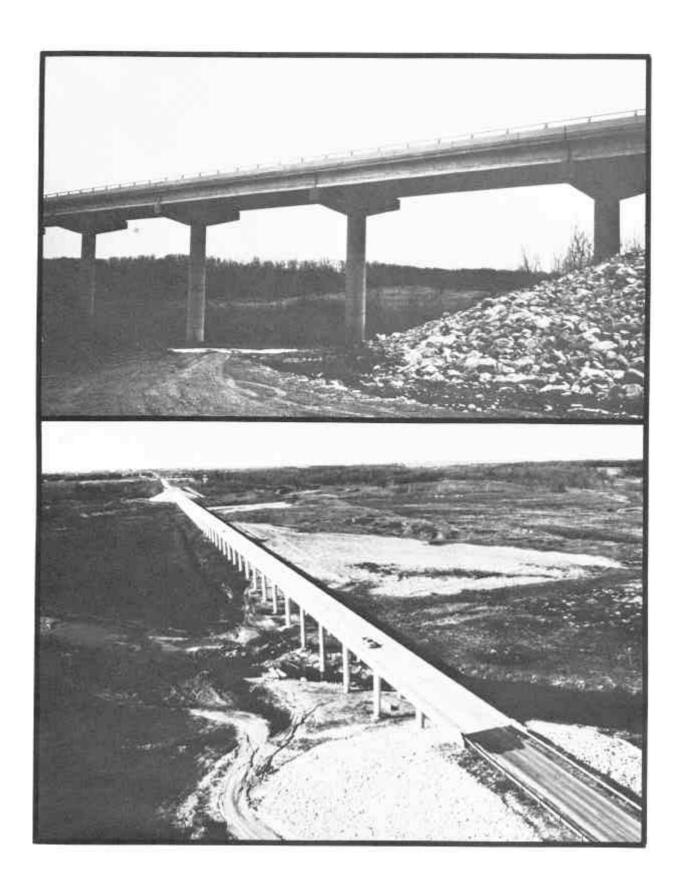
Supervision: St. Louis District

ENGINEERING DESIGN

Judges' Comments:

This project received Honorable Mention because of the economy of design and construction achieved particularly by the repetitive use of similar details for the bridge girders and single column supports from one end of the bridge structure to the other. The prefabricated technique for the 75' long pre-cast concrete I beams is an economical method for reducing concrete quantities. Simplicity of overall design is particularly stressed and is in excellent taste. Very carefully refined shapes, the careful selection and use of materials, and the detailing is of very high order.

Special note should be made of the low maintenance costs achieved by the design, a particularly important factor since maintenance will be the county's responsibility. For this type of construction, it is difficult to find a new method that will produce economy. The designers have done so in this project, by combining four spans together to produce continuous beams of 300 ft. length, and thus materially reducing costs in an extremely long bridge structure.



1969 LANDSCAPE ARCHITECTURAL

DESIGN AWARDS

"It is the sense of the jury that, to create esthetically pleasing as well as useful projects, more flexibility should be given by general guidelines rather than too limiting criteria, so that the designers can exercise their initiative in producing intuitive and sensitive solutions."

Panel of Judges

CONSERVATION OF NATURAL BEAUTY FIRST PLACE

RODMAN RESERVOIR, Cross-Florida Barge Canal, Oklawaha River. Central Florida

HONORABLE MENTION

HOGBACK ISLAND RECREATION AREA Sacramento River Bank Protection Project Sacramento River, Isleton, California

WRIGHTSVILLE RESERVOIR RECREATION AREA North Branch of Winooski River, Montpelier, Vermont

URBAN LANDSCAPE DESIGN HONORABLE MENTION

FLOOD CONTROL CHANNEL IMPROVEMENT, Sand Creek, Newton, Kansas



General Cassidy, second from left, is shown with Landscape Architectural Award Judges Stelly, Osmundson, Panel Chairman, and Rapuano.

JUDGES

Theodore Osmundson

State University in 1943. He is a Fellow in the American Society of Landscape Architects, past president of the Society and member of the Interprofessional Commission on Environmental Design (1967-69). He was a member of the California State Registration Board for Landscape Architects (1960-1968), and President, California Council of Landscape Architects (1958-1959, and 1967-1968).

Michael Rapuano

Vice-President and Partner, Clarke and Rapuano, Inc., Consulting Engineers, Landscape Architects and Planners, New York, New York. Mr. Rapuano received a Bachelor of Landscape Architecture Degree from Cornell University in 1927. He is a Fellow in the American Society of Landscape Architects. He served as a member of the National Commission of Fine Arts (1958-1962), member of the National Institute of Arts and Letters (1959-date), Fellow (1927-1930), Trustee (1947-date) and President (1958-1968) of the American Academy in Rome.

Principal, Theodore Osmundson & Associates, San Fran-

cisco, California. Mr. Osmundson obtained a Bachelor of Science degree in Landscape Architecture from Iowa

Dr. Matthias Stelly

Executive Secretary, American Society of Agronomy and Editor of the Agronomy Journal, Madison, Wisconsin. Dr. Stelly received a Bachelor of Science Degree from Southwestern Louisiana Institute in 1938, a Master of Science Degree from Louisiana State University in 1939, and his Doctorate from Iowa State University in 1942. He served as Professor of Agronomy at the University of Georgia, and Professor of Soils at Louisiana State University. He is a Fellow in both the American Society of Agronomy and the American Association for the Advancement of Science.

CONSERVATION OF NATURAL BEAUTY AWARD

RODMAN RESERVOIR, OKLAWAHA RIVER, Cross-Florida Barge Canal, Central Florida

Design Supervision:

Jacksonville District

Contractor: Gregg, Gibson, Gregg, Inc., Leesburg, Florida

Project Description:

A 22-mile segment of the Oklawaha River in north-central Florida was impounded to create the 13,000-acre Rodman Reservoir as an essential and integral part of the Cross-Florida Barge Canal, authorized by Congress as a navagation project. In addition to land clearing for the unobstructed and continuous navigation channel through the dense vegetation of the Oklawaha flood plain, major consideration was given to the conservation of forestry, fish and wildlife resources, outdoor recreation, preservation of scenic values, and noxious aquatic plant control. In designing the reservoir, some 5,500 acres of natural wetlands were left uncleared to preserve and enhance the natural beauty of the Oklawaha River and its tributary streams.

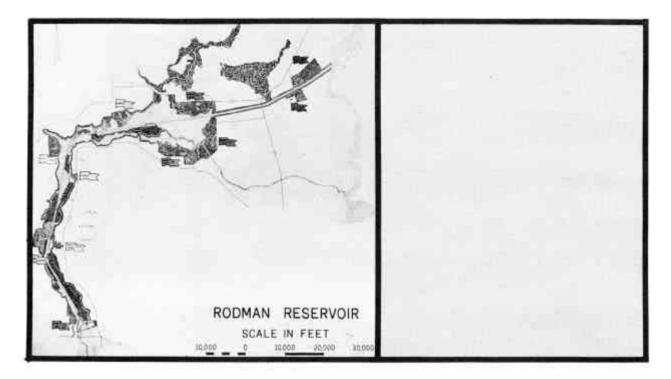


Judges Comments:

This is a creative solution of a functional inland waterway project enhanced by recreational area development. It provides a navigation channel through a large impoundment area with minimum disturbance of natural conditions instead of entirely through a narrow barge canal.

It is an excellent example of collaboration by engineers and landscape architects.

The plan shows clearly the more interesting results obtained from the natural approach in the upstream reservoir portion, compared with the narrow uniform channel in the downstream section.



CONSERVATION
OF
NATURAL
BEAUTY

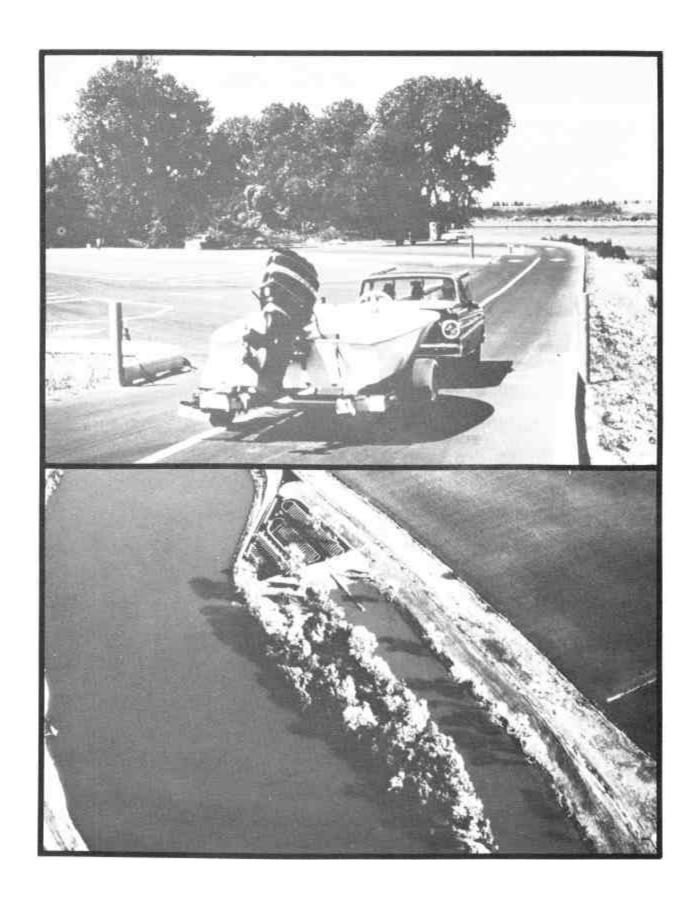
HOGBACK ISLAND RECREATION AREA Sacramento River Bank Protection Project Sacramento River, Isleton, California

Design Supervision: Sacramento District

Judges' Comments:

Conservation of the island and natural vegetation is excellent. The basic site plan is a good solution to the problem, which was essentially to provide parking to serve picnic sites on the island and a new boat ramp. By closing one end of the channel, the designers provided an area for parking and boat launching without disturbing the natural vegetation and character of the island. The solution provided for immediate access to the boat ramp as well as convenient walking access to the picnic sites.

However, the parking facility is too concentrated, stark and conspicuous. It could have been enveloped and screened as part of the general development.



CONSERVATION
OF
NATURAL
BEAUTY

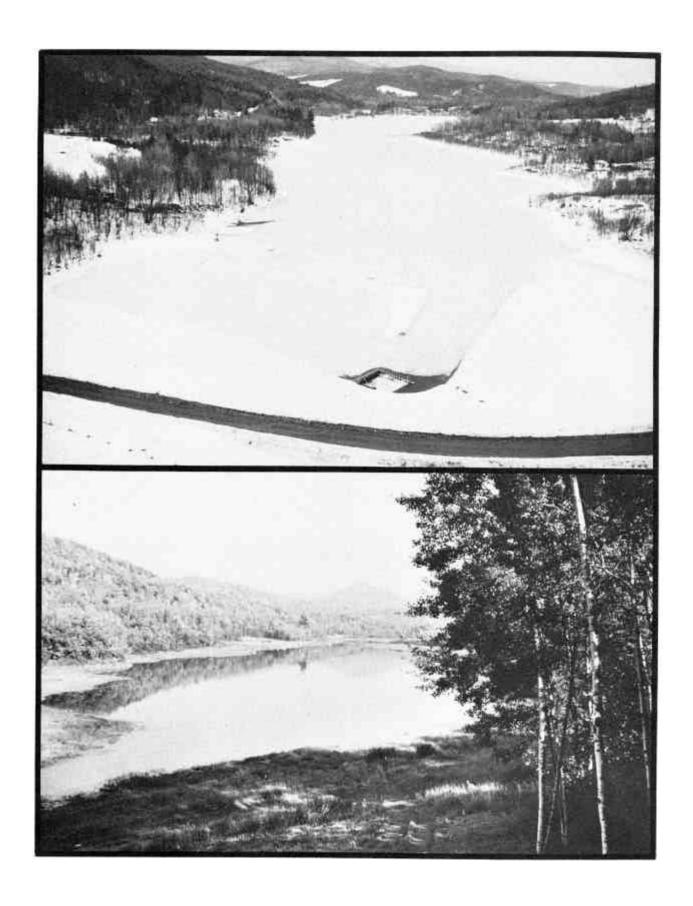
WRIGHTSVILLE RESERVOIR RECREATION AREA North Branch of Winooski River, Montpelier, Vermont

Design Supervision: New York District

Judges' Comments:

The project has transformed a strictly flood control reservoir with variable water level into a useful recreation area with a more constant pool, while conserving the existing natural beauty.

The roads and parking areas could be better related to the landscape by more curvilinear alignments.



URBAN LANDSCAPE DESIGN

FLOOD CONTROL CHANNEL IMPROVEMENT Sand Creek, Newton, Kansas

Design Supervision: Tulsa District

Judges' Comments:

Within the confines of available land area, the project shows commendable creation of both a durable and attractive channel which blends with its surroundings.

The constant water level provides desirable year-round opportunities for boating and other recreation. The turf cover has completely stabilized the adjacent banks more harmoniously than paved surface treatment.

Less restrictive criteria would allow a more varied crosssection with mounds and swales, and a less uniform channel, to create a more interesting and natural result.



PREVIOUS DESIGN AWARD WINNERS

ARCHITECTURE

1965 U. S. ARMY ACADEMIC BUILDING, INFANTRY CENTER Fort Benning, Georgia

1966 JOHN F. KENNEDY HALL, SPECIAL WARFARE CENTER Fort Bragg, North Carolina

1967 INDIAN MEMORIAL, ICE HARBOR DAM Snake River Washington

1968 ACADEMIC COMPLEX,
DEFENSE LANGUAGE INSTITUTE
Presidio of Monterey, California

AERO-MEDICAL EVACUATION FACILITY Pope Air Force Base, North Carolina

ENGINEERING	1966 1967 1968	ST. ANTHONY FALLS UPPER LOCK, Mississippi, River, Minneapolis, Minnesota SAM RAYBURN DAM OUTLET WORKS AND POWERHOUSE, Angelina River, Texas NORTH FORK OF POUND DAM, Pound River, Virginia
LANDSCAPE ARCHITECTURE		
CONSERVATION OF NATURAL BEAUTY	1967	ALVIN R. BUSH DAM AND RESERVOIR Kettle Creek, Pennsylvania
CONSERVATION OF NATURAL BEAUTY	1968	CANYON PARK, CANYON DAM AND RESERVOIR Guadalupe River, Texas
URBAN LANDSCAPE	1968	FAMILY HOUSING AREA Carlisle Barracks, Pennsylvania

DESIGN

